

2001 MONTANA YOUTH RISK BEHAVIOR SURVEY

Risk Behaviors of Montana Youth Based on Economic Well-Being

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Montana Youth Risk Behavior Survey

The Montana Youth Risk Behavior Survey (YRBS) is administered by the Montana Office of Public Instruction (OPI) every two years to 7th and 8th grade students and to high school students. The purpose of the survey is to help monitor the prevalence of behaviors that not only influence youth health, but also put youth at risk for the most significant health and social problems that can occur during adolescence. All schools in Montana are eligible to participate in the survey on a volunteer basis. Approximately 54 high schools are randomly selected to be included with high schools from other states for national data and reports.

The 2001 YRBS was conducted in March of 2001 with 7,655 7th and 8th grade students and 9,157 high school students. This represents approximately 31 percent of all 7th and 8th grade students and 18 percent of all high school students in Montana. Schools administering the survey to students were provided with detailed written instructions on conducting a random survey in their schools. To encourage accurate responses to sensitive questions, a strict protocol was implemented to protect the privacy and confidentiality of all participating students.

Survey Validity and Limitations

Data used in this report from the 2001 Youth Risk Behavior Survey are not based on a random survey. It would not be valid to generalize the findings from this survey to all 7th and 8th grade and high school students in Montana. It is only valid to attribute the results of this survey to the students who reported their behaviors in response to the items in the questionnaire. In addition, respondents in self-reported surveys may have a tendency to under-report behaviors that are socially undesirable, unhealthy, or illegal (alcohol consumption, drug use, seat belt non-usage, etc.) and overreport behaviors that are socially desirable (amount of exercise, etc.).

Economic Well-Being

Most economic data available within the state are reported at the county level. Three data series were used in this study to classify counties as being a high economic well-being area or low economic well-being area. The data series used for the classification were: (1) the percent of children aged 5 through 17 in each county in poverty (1998); (2) county median family income (1998); and (3) the percent of school-aged children in each county that participate in the school-associated reduced or free lunch program (1999). The U.S. Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor. The poverty thresholds do not vary geographically, but they are updated annually for inflation with the Consumer Price Index (CPI). The official poverty definition counts money income before taxes and excludes capital gains and noncash benefits (such as public housing, medicaid, and food stamps).

First, Montana counties were ranked from highest percent of students to lowest percent of students, based on the previously described two poverty variables. Then Montana counties were ranked from the lowest to the highest based on the median income variable. A composite ranking was then developed for each county based

on the three variables and the counties were then ranked again based on the composite score. Figure 1 lists the data used for the economic well-being ranking as well as the composite score. Schools from the lowest quartile of composite ranked Montana counties were classified as being from low economic well-being areas, while schools from the highest quartile of composite ranked counties were classified as being from high economic well-being areas.

Montana 7th and 8th Grade Survey Results

Overall, Montana 7th and 8th grade students who participated in the survey from low economic well-being areas tend to have higher health-risk behaviors than similar students from high economic well-being areas (Figure 2 and Figure 3). Following are highlights of the 7th and 8th grade results:

- **Students surveyed in Montana 7th and 8th grades from low economic well-being areas are more likely to have used tobacco products than youth from high economic well-being areas.**

Montana 7th and 8th grade students from low economic well-being areas are more likely (21.7 percent to 14.5 percent) to have smoked one or more cigarettes during the 30 days prior to the survey than students from high economic well-being areas.

Montana 7th and 8th graders from low economic well-being areas are twice as likely (10.8 percent vs. 5.4 percent) than comparable students from high economic well-being areas to have used chewing tobacco in the 30 days prior to taking the survey.

- **Montana 7th and 8th grade surveyed youth from low economic well-being areas are more likely to have used marijuana than comparable youth from high economic well-being areas.**

Montana 7th and 8th graders who live in low economic well-being areas are more likely (17.5 percent vs. 11.9 percent) to have used marijuana in the 30 days prior to taking the survey than 7th and 8th grade youth from high economic well-being areas. The major differences in risk behaviors between Montana 7th and 8th grade students from differing economic conditions occurred in the behaviors of smoking cigarettes and using marijuana, where students from low economic well-being areas tend to be at higher behavioral risk levels than students from high economic well-being areas. The differences in the remaining behavior categories are less than 2 percentage points; but, nonetheless, are important because the students from low economic well-being areas are at higher risk in most behavior categories, with the exceptions being considering suicide and physical activity.

Montana High School Survey Results

Except for health-risk behaviors associated with alcohol consumption and physical activity, Montana high school students that participated in the YRBS from low economic well-being areas tend to have higher health-risk behaviors than similar students from high economic well-being areas (Figure 4 and Figure 5). Following are highlights of the high school results:

- **Montana high school students who participated in the survey from high economic well-being areas are more likely to have used/abused alcohol than youth from low economic well-being areas.**

Montana high school students who reside in high economic well-being areas are more likely (57.0 percent vs. 51.6 percent) than students who live in low economic well-being areas to have had at least one drink of alcohol in the 30 days prior to taking the survey.

Montana high school students from high economic well-being areas are slightly more likely (22.8 percent vs. 22.0 percent) than students from low economic well-being areas to have driven a car after drinking alcohol in the 30 days prior to taking the survey.

Montana high school students from high economic well-being areas are more likely (43.6 percent vs. 40.1 percent) than students from low economic well-being areas to have participated in binge drinking (five or more drinks of alcohol in a row) in the 30 days prior to taking the survey.

- **Surveyed students in Montana high schools from low economic well-being areas are more likely to have used tobacco products than youth from high economic well-being areas.**

Montana high school students from low economic well-being areas are more likely (35.4 percent to 30.4 percent) to have smoked cigarettes on one or more days during the 30 days prior to the survey than high school students from high economic well-being areas.

Montana high school students from low economic well-being areas are more likely (18.5 percent vs. 13.9 percent) than similar students from high economic well-being areas to have used chewing tobacco in the 30 days prior to taking the survey.

- **Surveyed youth from Montana high schools located in low economic well-being areas are more likely to be sexually active than similar youth from high economic well-being areas.**

Montana high school students who participated in the survey from low economic well-being areas are more likely (32.9 percent vs. 28.0 percent) than high school students from high economic well-being areas to have had sexual intercourse during the three months prior to taking the survey.

- **Montana high school survey participants from low economic well-being areas are more likely to have been in a fight than similar youth from high economic well-being areas.**

Survey students from Montana high schools who reside in low economic well-being areas are more likely (34.4 percent vs. 30.7 percent) than comparable students from high economic well-being areas to have been in at least one fight in the 12 months prior to taking the survey.

- **Montana high school youth who participated in the survey from low economic well-being areas are more likely to have exercised regularly than similar youth from high economic well-being areas.**

Montana high school students from low economic well-being areas are more likely (70.0 percent vs. 67.0 percent) than high school students from high economic well-being areas to have exercised on at least three of the last seven days prior to taking the survey.

In general, students from low economic well-being areas were slightly more likely to engage in the selected health-risk behaviors than were students from high economic well-being areas except for the selected alcohol-related behaviors and exercising regularly. In these cases, students from high economic well-being areas were slightly more likely than students from low economic well-being areas to engage in the risk behaviors. It is also important to note that the trend in behavior differences reported for 7th and 8th grade students related to tobacco and marijuana use continued at the high school level, but the differences at the high school level were not quite as great.

Conclusions and Recommendations

This was the second study of the effects of economic well-being on health-risk behaviors of Montana youth. Many of the differences that exist between the economic areas also existed in the 1999 Youth Risk Behavior Survey. The data obtained from the current survey indicate that there may be some differences in the risks students take in their health behaviors based upon economic well-being. This is especially true with respect to tobacco and marijuana use - two risk behaviors that, if developed as a habit at an early age, are difficult or impossible to stop. It is highly recommended that the Office of Public Instruction continue this study for future youth risk behavior surveys to identify if these risk differences are a one-time phenomena or if they continue to occur.

Figure 1
2001 Youth Risk Behavior Survey
Economic Well-Being Data

Montana County	Percent 5-17 in Poverty, 1998	Median Family Income, 1998	Percent Free/Reduced Lunch, 1999	Poverty Rank	Income Rank	Free/Reduced Lunch Rank	Composite Ranking for Study
Beaverhead County	21.2	\$29,231	21.2	29	28	49	35.3
Big Horn County	32.6	\$24,406	69.6	3	10	1	4.7
Blaine County	32.5	\$23,828	64.6	4	9	2	5.0
Broadwater County	20.1	\$29,725	30.4	30	32	32	31.3
Carbon County	15.6	\$29,995	29.8	51	37	34	40.7
Carter County	26.1	\$22,050	49.7	9	5	11	8.3
Cascade County	18.0	\$32,424	31.5	39	46	28	37.7
Chouteau County	16.7	\$30,644	36.7	47	41	21	36.3
Custer County	23.0	\$29,480	29.1	23	29	38	30.0
Daniels County	18.7	\$29,532	24.1	36	30	45	37.0
Dawson County	16.8	\$32,962	28.8	46	48	39	44.3
Deer Lodge County	24.9	\$27,811	31.2	14	24	29	22.3
Fallon County	15.5	\$32,597	20.1	52	47	50	49.7
Fergus County	18.8	\$28,283	31.8	35	26	27	29.3
Flathead County	17.1	\$34,059	27.8	44	49	41	44.7
Gallatin County	13.4	\$36,569	19.0	54	54	54	54.0
Garfield County	17.4	\$25,551	20.1	40	14	50	34.7
Glacier County	38.2	\$21,758	64.1	2	4	3	3.0
Golden Valley County	24.9	\$19,018	50.6	15	1	8	8.0
Granite County	26.3	\$26,961	38.3	8	21	20	16.3
Hill County	23.7	\$31,180	42.3	20	43	17	26.7
Jefferson County	12.1	\$43,074	20.1	56	56	50	54.0
Judith Basin County	23.1	\$26,161	36.0	22	17	23	20.7
Lake County	26.1	\$27,473	52.0	10	23	6	13.0
Lewis & Clark County	15.7	\$38,091	21.5	50	55	48	51.0
Liberty County	17.4	\$26,325	15.9	41	19	56	38.7
Lincoln County	24.3	\$28,463	41.6	17	27	18	20.7
McCone County	19.4	\$29,745	24.1	33	34	45	37.3
Madison County	16.5	\$29,741	19.9	48	33	53	44.7
Meagher County	27.1	\$22,084	43.7	7	6	14	9.0
Mineral County	28.1	\$25,782	45.0	6	16	13	11.7
Missoula County	17.3	\$34,897	29.2	42	50	37	43.0
Musselshell County	23.9	\$22,119	39.3	19	7	19	15.0
Park County	18.4	\$30,120	32.2	37	39	26	34.0
Petroleum County	26.1	\$21,625	51.0	11	3	7	7.0
Phillips County	25.5	\$26,164	43.1	12	18	15	15.0
Pondera County	25.1	\$26,820	43.1	13	20	15	16.0
Powder River County	21.9	\$27,248	23.9	26	22	47	31.7
Powell County	23.3	\$30,945	25.3	21	42	44	35.7
Prairie County	16.3	\$24,982	29.4	49	12	36	32.3
Ravalli County	19.8	\$30,003	31.2	31	38	29	32.7
Richland County	18.1	\$31,710	26.4	38	45	42	41.7
Roosevelt County	39.0	\$23,779	62.3	1	8	4	4.3
Rosebud County	24.5	\$35,548	50.4	16	51	9	25.3
Sanders County	24.3	\$25,554	52.9	18	15	5	12.7
Sheridan County	17.1	\$29,622	29.8	45	31	34	36.7
Silver Bow County	21.5	\$31,262	25.5	27	44	43	38.0
Stillwater County	13.2	\$36,425	16.6	55	52	55	54.0
Sweet Grass County	17.3	\$29,814	34.4	43	35	24	34.0
Teton County	19.5	\$28,061	30.2	32	25	33	30.0
Toole County	19.1	\$30,152	31.2	34	40	29	34.3
Treasure County	22.0	\$24,997	36.1	25	13	22	20.0
Valley County	22.9	\$29,836	33.1	24	36	25	28.3
Wheatland County	30.4	\$20,597	47.5	5	2	12	6.3
Wibaux County	21.3	\$24,573	50.2	28	11	10	16.3
Yellowstone County	15.1	\$36,490	28.7	53	53	40	48.7

Figure 2
2001 Youth Risk Behavior Survey
Risk Behaviors Based on Economic Well-Being
Montana 7th and 8th Grade Students

Health Risk Behavior	High Economic Well-Being	Low Economic Well-Being	Statewide Average
Had at least one drink of alcohol during the past 30 days (Q52)	30.4%	29.7%	30.2%
Drove a car when drinking alcohol during the past 30 days (Q13)	6.7%	6.9%	6.8%
Had five or more drinks of alcohol in a row during the past 30 days (Q53)	17.8%	19.4%	17.9%
Smoked on one or more days during the past 30 days (Q34)	14.5%	21.7%	15.8%
Used chewing tobacco or snuff during the past 30 days (Q43)	5.4%	10.8%	7.4%
Used marijuana at least once during the past 30 days (Q57)	11.9%	17.5%	12.5%
Sniffed glue or used inhalants to get high during their life (Q61)	15.4%	17.6%	15.4%
Had sexual intercourse during the past three months (Q71)	10.0%	10.7%	9.7%
Had been in at least one fight during the past 12 months (Q20)	40.7%	42.1%	40.3%
Seriously considered suicide during the past 12 months (Q26)	17.8%	15.7%	16.8%
Tend to think of themselves as about the right weight (Q76)	55.5%	54.7%	55.5%
Exercised on at least three of the last seven days (Q90)	73.6%	74.5%	73.4%

Figure 3
2001 Youth Risk Behavior Survey
Risk Behaviors Based on Economic Well-Being
Montana 7th and 8th Grade Students

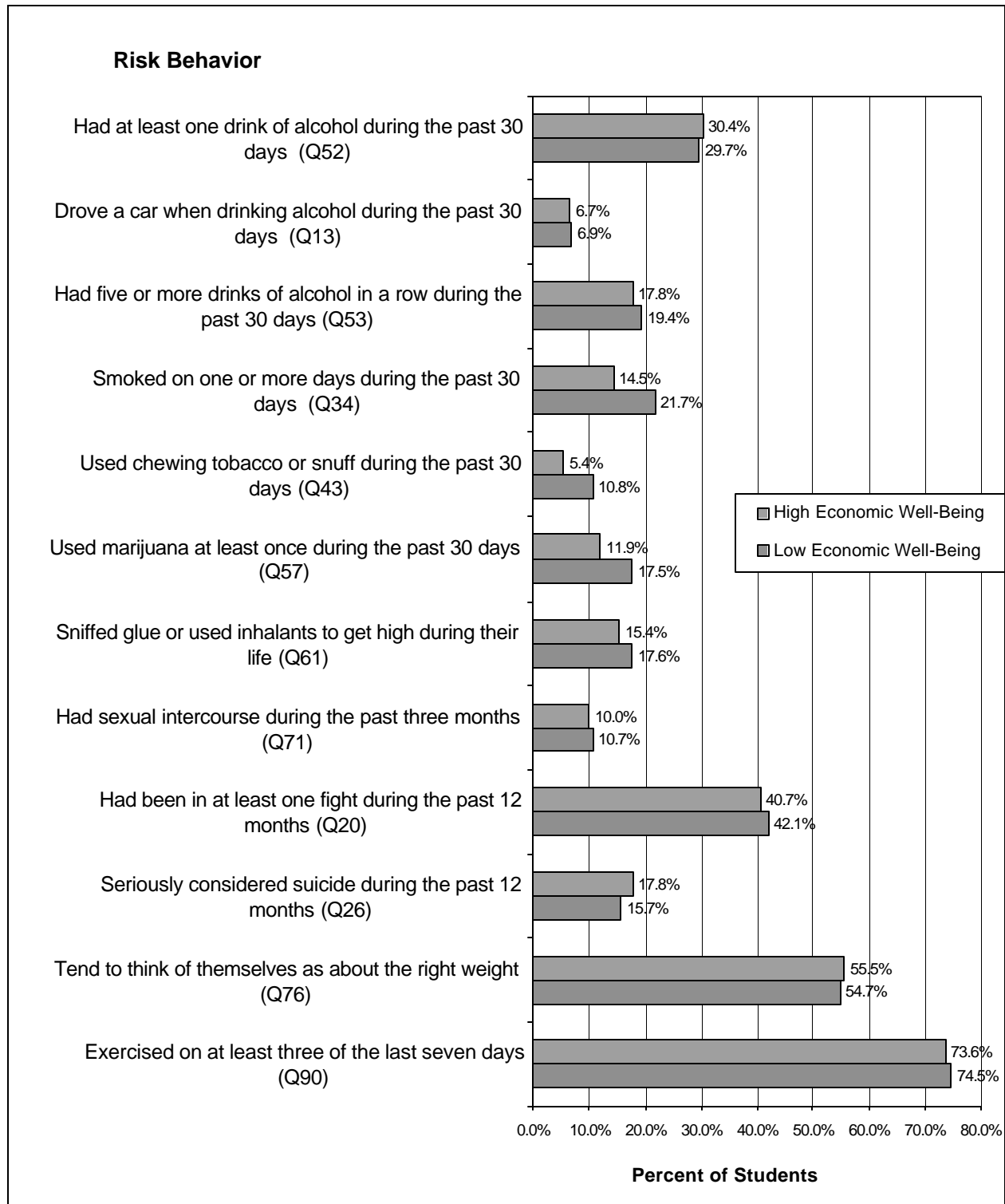


Figure 4
2001 Youth Risk Behavior Survey
Risk Behaviors Based on Economic Well-Being
Montana High School Students

Health Risk Behavior	High Economic Well-Being	Low Economic Well-Being	Statewide Average
Had at least one drink of alcohol during the past 30 days (Q52)	51.0%	51.6%	54.1%
Drove a car when drinking alcohol during the past 30 days (Q13)	22.8%	22.0%	21.8%
Had five or more drinks of alcohol in a row during the past 30 days (Q53)	43.6%	40.1%	41.4%
Smoked on one or more days during the past 30 days (Q34)	30.4%	35.4%	28.5%
Used chewing tobacco or snuff during the past 30 days (Q43)	13.9%	18.5%	15.7%
Used marijuana at least once during the past 30 days (Q57)	26.8%	27.6%	27.1%
Sniffed glue or used inhalants to get high during their life (Q61)	15.8%	16.8%	15.0%
Had sexual intercourse during the past three months (Q71)	28.0%	32.9%	30.7%
Had been in at least one fight during the past 12 months (Q20)	30.7%	34.4%	31.6%
Seriously considered suicide during the past 12 months (Q26)	18.7%	20.2%	19.4%
Tend to think of themselves as about the right weight (Q76)	54.1%	51.1%	54.3%
Exercised on at least three of the last seven days (Q90)	67.0%	70.0%	67.6%

Figure 5
2001 Youth Risk Behavior Survey
Risk Behaviors Based on Economic Well-Being
Montana High School Students

